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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,802	06/30/2000	Martin Cieslak	CISCP146	2424

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EXAMINER

KIANERSI, MITRA

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/608,802

Applicant(s)

CIESLAK ET AL.

Examiner

mitra kianersi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 30 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Claims 1-79 have been examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 16, 19-21, 30, 33, 40-42, 54, 57-59, 71-72, 78-79 are rejected under 35 U.S.C. 102(e) as being anticipated by Leighton et al. (US 2002/0129134)

1. As per claim 1, Leighton et al. discloses a method of facilitating redirection of traffic sent from a first processing device (corresponds to East Coast Data Center) to a second processing device (West Coast Data Center), the method comprising:

-at a third processing device associated with a plurality of traffic handling systems, receiving traffic information from at least a portion of the associated traffic handling systems, wherein the traffic information specifies which data should be redirected to the portion of associated traffic handling systems; (mirrored site for directing a user, prg [0023] and [0120]) and

-determining how to redirect data received by the third processing device to a selected traffic handling system based on the received traffic information.(common portion of the rout, prg [0031] and [0043])

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2. As per claim 2, Leighton et al. discloses a method wherein the determination of redirecting data is accomplished by:

- communicating the traffic information to at least a designated one of the associated traffic handling systems; (direct traffic to a mirrored website, prg [0007])and

- at the third processing device, receiving traffic redirection information from the designated traffic handling system, the traffic redirection information being based on the communicated traffic information.(the network agent "pings" the core point from each data center, prgs [0043], [0041] and [0036])

3. As per claim 3, Leighton et al. discloses a method comprising at the third processing device, building or updating a data structure based on the received traffic information, wherein the traffic information is communicated to the designated traffic handling system within the data structure. (corresponding to continuously pre-computing, prg [0028])

4. As per claims 4, Leighton et al. discloses a method where in the third processing device, receiving a packet from the first processing device destined for the second processing device; and redirecting the packet to a selected one of the traffic handling systems based on the traffic redirection information. (corresponds to determining parameters, prg [0043]) and (Fig.4)

5. As per claims 16 Leighton discloses a method wherein the traffic information sent from a selected traffic handling system to the third processing device includes security options for specifying an authentication level for messages communicated between the third processing device and the selected traffic handling system. (See rejection of claim 1)

6. As per claims 19 Leighton discloses a method wherein the traffic information sent from a selected traffic handling system includes identifying information for the selected traffic handling system. ([0010]

7. As per claim 20, Leighton discloses a method of facilitating redirection of traffic sent from a first processing device to a second processing device, the method comprising: (see Abstract)
at a designated traffic handling system associated with a plurality of traffic handling systems and one or more routers, receiving traffic information from at least one of the routers, wherein the traffic information specifies which data should be redirected to which associated traffic handling systems; (prg [0023] and [0120]) and allocating traffic portions to each traffic handling system based on the received traffic information.(prg [0031] and [0043])

8. Claims 21, 41 and 59, recite similar limitation as claim 3. They are analyzed and rejected by the same rational.

9. Claims 30 and 54 recite similar limitation as claim 16. They are analyzed and rejected by the same rational.

10. Claims 33, 57 and 71 recite similar limitation as claim 19. They are analyzed and rejected by the same rational.

11. Claims 42 recite similar limitation as claim 4. They are analyzed and rejected by the same rational.

12. As per claim 40, Leighton discloses the invention substantially as claimed including a first computer system associated with a plurality of traffic handling systems and operable to facilitate redirection of traffic sent from a second computer system to a third computer system, the traffic being redirected to a selected traffic handling system, the computer system comprising:
a memory; and a processor coupled to the memory (see Fig.1) and (computer systems 106 and 108)

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wherein at least one of the memory and the processor are adapted to provide:

- receiving traffic information from at least a portion of the associated traffic handling systems, wherein the traffic information specifies which data should be redirected to the portion of associated traffic handling systems;([0023] and [0120])

- communicating the traffic information to at least a designated one of the associated traffic handling systems; ([0007])and

- receiving traffic redirection information from the designated traffic handling system, the traffic redirection information being based on the communicated traffic information.(Prgs [0043], [0041] and [0036])

13. As per claim 58, Leighton discloses the invention substantially as claimed including A designated traffic handling system associated with a plurality of traffic handling systems and operable to facilitate redirection of traffic sent from a first computer system to a second computer system, the traffic being redirected by a third computer system to a selected traffic handling system, the designated traffic handling system comprising:

a memory; and a processor coupled to the memory,

wherein at least one of the memory and the processor are adapted to provide:

- receiving traffic information from the third computer system, wherein the traffic information specifies which data should be redirected to which associated traffic handling systems; (prgs [0023] and [0120] and

- allocating traffic portions to each traffic handling system based on the to received traffic information.(Prgs [0031] and [0043]

14. As per claim 72, Leighton discloses the invention substantially as claimed including a first processing system operable to reinsert a redirected packet into a flow between a second processing device and a third processing device, the computer system comprising: a memory; and a processor coupled to the memory, wherein at least one of the memory and the processor are adapted to provide:

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receiving a redirected packet from a fourth processing device in the first processing device (prg [0023] and [0120], Leighton); and sending the packet back to the fourth processing device for transmission.(prg [0031] and [0043])

15. As per claim 78, Leighton discloses the invention substantially as claimed including A computer program product for facilitating redirection of traffic sent from a first processing device to a second processing device, the computer program product comprising:

at least one computer readable medium;

computer program instructions stored within the at least one computer readable product configured to cause a processing device to provide:

at a third processing device associated with a plurality of traffic

handling systems, receiving traffic information from at least a portion

of the associated traffic handling systems, wherein the traffic information specifies which data should be redirected to the portion of associated traffic handling systems;(prg [0023] and [0120]

communicating the traffic information to at least a designated one of the associated traffic handling systems; and at the third processing device, receiving traffic redirection information from the designated traffic handling system, the traffic redirection information being based on the communicated traffic information.(prgs [0041] and [0043], and [[0036]

16. Claims 79 recite similar limitation as claim 2. It is analyzed and rejected by the same rational.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-15, 17-18, 22-29, 31-32, 35, 37-39, 43-53, 55-56, 60-70, 73, 75-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leighton et al. (US 2002/0129134), and further in view of Malkin (US Pat No. 6,247,054).

17. As per claims 5 and 43, Leighton et al. discloses a method for
-receiving the packet back after redirecting it to the selected traffic handling system; Leighton et al. fail to teach determining that the packet is to be sent to the packet's original destination address instead of being redirected to the selected traffic handling system; and sending the packet to its original destination.

However, Malkin teaches a destination port of the transport layer may indirectly indicate to the NAS (Network Access server) what the type of service the subscriber is attempting to access. The NAS can compare the service request by the subscriber with the services that are available to the subscriber, as indicated by the authentication server during the authentication phase of the PPP (point-to-Point Protocol). (col 4, lines 8-20)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ Malkin method of encapsulation for redirecting packets with Leighton et al. to mitigate the problem of intruding on firewalls and other detection mechanisms and also, create a unique method of load balancing for cost minimization and also bandwidth cost.

18. As per claim 6, (Leighton-Malkin) disclose the invention substantially as claimed including where the packet to be sent to the packet's original destination by determining

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that the packet is encapsulated and de-encapsulating the packet prior to sending the packet to its original destination. (col 4, lines 44-51, Malkin)

19. As per claim 7, traffic information sent from a selected traffic handling system to the third processing device includes service options specifying which data is to be redirected to the selected traffic handling system. (prg [0010], Leighton)

20. As per claim 8, (Leighton-Malkin) disclose the invention substantially as claimed including wherein the service options include a plurality of fields that are configurable to indicate that one or more fields of a packet received in the third processing device are to be used to determine redirection of packets to the selected traffic handling system. (col 3 lines 14-30, Malkin)

21. As per claim 9, (Leighton-Malkin) disclose the invention substantially as claimed including wherein the fields are selected from a group consisting of a source IP field, a destination IP field a source port field, a destination port field, o source IP alternative field, a destination IP alternative field, a source port alternative field, and a destination port alternative field. (prg [0033] and [0009], Leighton)

22. As per claim 10, (Leighton-Malkin) disclose the invention substantially as claimed including a method as recited in claim 9, wherein each field indicates that a corresponding field of a packet received in the third processing device is to be used to generate an index to a table identifying the plurality of associated traffic handling systems, the generated index being associated with the selected traffic handling system. (prg [0067])

23. As per claim 11, (Leighton-Malkin) disclose the invention substantially as claimed including wherein each field indicates that a hashed value of the corresponding field of the received packet is to be used to generate the index to the table identifying the plurality of associated traffic handling systems. The step of claim 11 is obvious because Leighton et al. in (prg [0026]) discloses an operating system Linux that is a Unix machine. Data encryption standard (DES) is used on Unix machine for encryption and is called hash.

24. As per claim 12, (Leighton-Malkin) disclose the invention substantially as claimed including a method wherein at least one of the fields may be set to indicate one or more port identifiers of traffic received in the third processing device. (prg [0064], Leighton)

25. Claims 13 and 14 a method wherein the fields are selected from a group consisting of a port 0 field, a port 1 field, a port 2 field, a port 3 field, a port 4 field, a port 5 field, a port 6 field, and a port 7 field. And also wherein the fields includes a source/destination field to indicate whether the port identifiers of the received traffic are source ports or destination ports are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

26. As per claim 15 a method (Leighton-Malkin) discloses the invention substantially as claimed including in the third processing device, receiving a packet from the first processing device destined for the second processing device; ([0043]) and (Fig.4, Leighton) and when one or more port identifiers of the received packet matches a corresponding set field of the service options of the selected traffic handling system, redirecting the packet to the selected traffic handling system. (col 3, line 14-30, Malkin)

27. As per claim 17, a method wherein the security options are configurable to select no authentication for messages communicated between the third processing device and the selected traffic handling system. (The step of claim 17 is obvious, because selecting security options is optional).

28. As per claim 18, (Leighton-Malkin) disclose the invention substantially as claimed including, a method wherein the security options are configurable to require a predetermined password encoded within messages communicated between the third processing device and the selected traffic handling system. (The step is obvious, because an encoded password is an important part of a encryption process. (parg [0026])

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29. Claims 35, 44 and 73, recite similar limitation as claim 6. They are analyzed and rejected by the same rational.
30. Claims 22, 45 and 60, recite similar limitation as claim 7. They are analyzed and rejected by the same rational.
31. Claims 23, 46 and 61 recite similar limitation as claim 8. They are analyzed and rejected by the same rational.
32. Claims 24, 47 and 62 recite similar limitation as claim 9. They are analyzed and rejected by the same rational.
33. Claims 25, 39 and 48, 63 and 77 recite similar limitation as claim 10. They are analyzed and rejected by the same rational.
34. Claims 26, 49 and 64 and 68 recite similar limitation as claim 11. They are analyzed and rejected by the same rational.
35. Claims 27, 50 and 65 recite similar limitation as claim 12. They are analyzed and rejected by the same rational.
36. Claims 28, 51 and 66 recite similar limitation as claim 13. They are analyzed and rejected by the same rational.
37. Claims 29, 52 and 67 recite similar limitation as claim 14. They are analyzed and rejected by the same rational.
38. Claims 43 recite similar limitation as claim 5. It is analyzed and rejected by the same rational.
39. Claim 53 recites similar limitation as claim 15. They are analyzed and rejected by the same rational.
40. Claims 31, 55 and 69 recite similar limitation as claim 17. They are analyzed and rejected by the same rational.
41. Claims 32, 56 and 70 recite similar limitation as claim 18. They are analyzed and rejected by the same rational.
42. As per claim 34, Malkin discloses the invention substantially as claimed including a method of reinserting a redirected packet into a flow between a first processing device and a second processing device., the method comprising: receiving a redirected packet from a third processing device in a fourth

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processing device; and sending the packet back to the third processing device for transmission.(col 4, lines 8-20, Malkin)

43. As per claim 37 and 75, (Leighton-Malkin) discloses the invention substantially as claimed including a method comprising modifying the redirected packet prior to sending the packet back.(The step of claim 37 is obvious, because when a packet is back means either the destination was not found or an error has occurred.

44. As per claims 38 and 76, (Leighton-Malkin) discloses the invention substantially as claimed including, a method wherein a destination addresses of the redirected packet is modified prior to sending the packet back. (Prg [0031] and [0043], Leighton)

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 36 and 74 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. On page 21 of specification, and also in claims 36 and 74, the applicant describes how encapsulation process is performed in a GRE packet without explaining further about a GRE packet and the advantage of using it in this invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to mitra kianersi whose telephone number is (703) 305-4650. The examiner can normally be reached on 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-9923.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Mitra Kianersi
Nov/24/2003


DAVID WILEY
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